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Optimization:	-O0	-O1	-O2	-O3
Average CPI	1.212	1.201	1.225	1.206
Instructions	1, 024, 072, 515	1,024,024,395	1,024,213,466	1,024,211,831
Branch-Misses	6, 738, 101	6,761,396	6,777,009	6,747,515
Runtime (Measured) (Seconds)	1.663	1.677	1.673	1.682
Runtime (Equation) (Seconds)	1.127	1.131	1.131	1.144

Table 1: Experimental Data

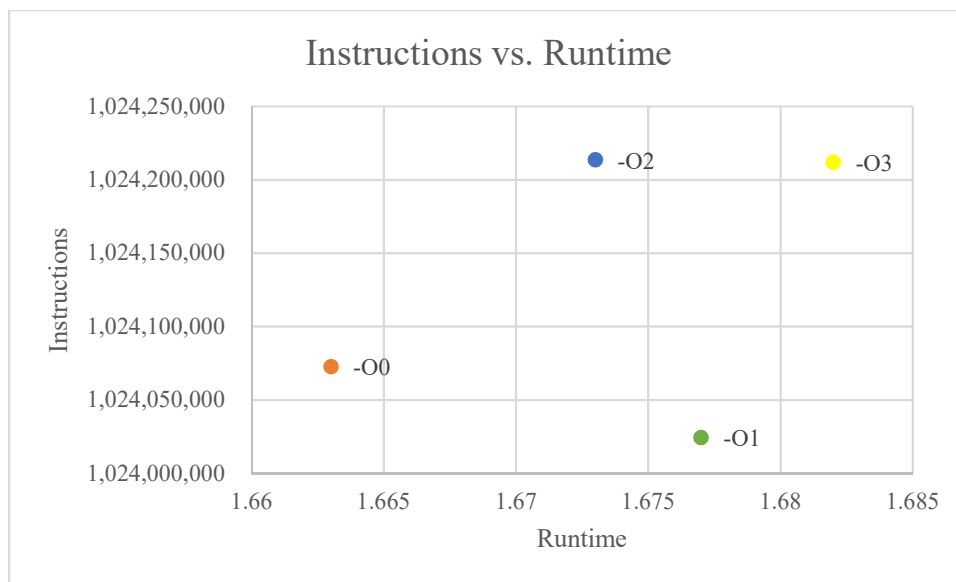


Figure 1: Instruction vs. Runtime graph

80% of time is spent on matadd function. In general, I don't see any benefit using the different levels of optimization as there is a 0.02 second difference between the four levels of optimization. There are also marginal differences in branch-misses, CPI, and instruction count. It might be the way I wrote the program, but I don't see any difference in how the compiler is optimizing or changing my code between the different levels of optimization.